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The Latest from XENON (20' + 5')

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XENON1T, the latest phase of the XENON program, consists of a 1 m dual phase xenon TPC containing a 1 ton fiducial target. Using this largest liquid xenon detector built to date, combined with an unprecedentedly low background, the most sensitive dark matter search will be conducted, pushing the sensitivity to the coherent WIMP-nucleon cross section down to

 $1.6 \times 10^{-47} \ cm^2$ for a 50 GeV/c² WIMP. This leap forward in sensitivity will probe deeply into the phase space favored by SUSY models for dark matter and poses a high discovery potential. With the construction of the experiment completed, the status of the experiment will be given focusing on the unique features of the detector, the potential physics reach, and the results of the first data.

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